DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-004092
Date Inspected: 19-Sep-2008

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island

OSM Arrival Time: 1330
OSM Departure Time: 2130
Location: Shanghai, China

CWI Name:	NA		**CWI Present:**	☑ Yes	☐ No
Inspected CWI report:	☐ Yes	☐ No ☑ N/A	**Rod Oven in Use:**	☐ Yes	☐ No ☑ N/A
Electrode to specification:	☐ Yes	☐ No ☑ N/A	**Weld Procedures Followed:**	☐ Yes	☐ No ☑ N/A
Qualified Welders:	☐ Yes	☐ No ☑ N/A	**Verified Joint Fit-up:**	☐ Yes	☐ No ☑ N/A
Approved Drawings:	☑ Yes	☐ No ☐ N/A	**Approved WPS:**	☐ Yes	☐ No ☑ N/A
			Delayed / Cancelled:	☐ Yes	☑ No ☐ N/A

Bridge No: 34-0006
Component: OBG Fabrication

Summary of Items Observed:

Caltrans Quality Assurance (QA) Inspector, Mr. Paul Dawson, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. The QA Inspector observed the following:

Bay 1

The QA Inspector continued monitoring of the closed rib tack weld testing that had been started earlier today using gantry #1 in bay 1. Caltrans Inspector Mr. Robert Vatcher informed this QA Inspector that he has completed surveillance of the welding of the closed rib test plate welds and the tack weld locations are ready to be labeled and marked for cutting.

The QA Inspector observed the closed rib PMT welds are numbered differently that what has been used for normal welding of the closed ribs. ZPMC has previously identified all other closed rib welding using the overhead gantry as having weld #1 on the south side of the PMT plate and weld #6 on the north side. Today the QA Inspector observed ZPMC has marked the south most tack weld PMT plate that is closest to gantry #2 as weld #6 and the north most weld, away from gantry #2 is identified as weld #1. The QA Inspector asked ABF representative Mr. Man-kit Li why weld #1 is on the north instead of being on the south. Mr. Li said ZPMC installed the PMT plate backwards by mistake and the tack weld identification is identical to that which was previously documented. The QA Inspector initially identified each of the tack weld PMT specimen locations using the traditional weld numbering with weld #1 being on the south side of the plate. Following discussion with Mr. Li the QA Inspector renumbered each of the specimen locations to match what ZPMC had previously written at each location, with specimen 1A being on the north west corner and specimen 6C on the south east corner. The QA Inspector

observed specimen 3C has underfill for a length of approximately 90 mm, specimen 3D has underfill for a length of approximately 90 mm, specimen 4C has underfill for a length of approximately 13 mm, specimen 5C has underfill for a length of approximately 45 mm, specimen 6B has underfill for a length of approximately 15 mm. All other tack weld locations appear to have acceptable weld surfaces. The QA Inspector used a steel "Caltrans" stamp to identify each of the specimen macroetch locations. Photographs of each of the tack weld specimen locations and a scanned sketch of the rib specimen cut locations are located on the OBG common server under Team OBG "Tack Weld PMT Sept 2008".

ABF/Fluor representative Mr. Man-kit Li informed the QA Inspector that ZPMC will not perform any additional work on these tack weld test plates until tomorrow (Saturday) afternoon and that he is aware that a Caltrans representative needs to be present to witness the cutting of the tack weld specimens.

Summary of Conversations:

See above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Ady Velasco 13816942685, who represents the Office of Structural Materials for your project.

Inspected By:	Dawson,Paul	Quality Assurance Inspector
Reviewed By:	Carreon,Albert	QA Reviewer